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1 1. A powering assembly for converting a manual hand truck to a motor
2 driven hand truck, the assembly comprising:
3 a hand truck having a frame defining an outer frame width;
4 an electric motor;
5 a transaxle driven by the electric motor and having differentially
6 connected right and left axles;
7 right and left wheels attached to the right and left axles respectively;
8 a motor controller electrically connected to the motor; and
9 a power source electrically connected to the motor controller; and
10 said powering assembly fits substantially within the outer frame width.

2. The powering assembly of Claim 1, wherein the wheels are connected
to the axles so that they may be set to rotate freely on the axles or to be
fixed to the axles so that they do not rotate with respect to the axles.

1 3. The powering assembly of Claim 2, wherein:
2 the axles include wheel grooves, and wherein the wheels include fixing
3 pins for engaging the wheel grooves to attach the wheels to the axles so that
4 they are axially fixed with respect to the axles; and
5 the powering assembly further includes locking hubs keyed to the
6 axles and having a first hub position and a second hub position, and wherein:
7 in the first hub position the locking hub is disengaged from the
8 respective wheel; and

1 in the second hub position the locking hub is engaged with the
2 respective wheel.

4. The powering assembly of Claim 1, wherein the outer frame width is between approximately ten inches and approximately eighteen inches.

5. The powering assembly of Claim 4, wherein the outer frame width is approximately twelve inches.

6. The powering assembly of Claim 1, wherein the power source comprises two twelve volt batteries.

7. The powering assembly of Claim 1, wherein the motor is between approximately one quarter and approximately one half horse power.

8. The powering assembly of Claim 7, wherein the motor is between approximately one quarter and approximately one third horse power.

9. The powering assembly of Claim 8, wherein the motor is approximately one quarter horse power.

10. The powering assembly of Claim 9, wherein the transaxle and motor may be removed from the hand truck by releasing four fasteners.

11. The powering assembly of Claim 1, further including side plates defining a protective profile for the powering assembly.
12. The powering assembly of Claim 11, further including slides attached to the side rails to facilitate sliding the hand truck over obstacles.
13. The powering assembly of Claim 12, wherein the slides are fabricated from polytetrafluoroethene (PTFE).
14. The powering assembly of Claim 1, wherein the hand truck includes handles, and wherein the powering assembly includes a speed control attached to the handles, and a power on/off indicator residing proximal to the speed control.
15. The powering assembly of Claim 1, further including a hi/low speed switch for selecting a high speed mode or a low speed mode.
16. The powering assembly of Claim 15, wherein the high speed is approximately four miles per hour and the low speed is approximately two miles per hour.
17. The powering assembly of Claim 1, wherein the hand truck is a convertible hand truck having a two wheel mode and a platform mode.

18. The powering assembly of Claim 17, wherein a low speed is automatically selected when the hand truck is in the two wheel mode.

1 19. A powered hand truck comprising:
2 a hand truck having a frame defining an outer frame width between
3 approximately ten inches and approximately eighteen inches;
4 an electric motor;
5 a transaxle driven by the electric motor and having differentially
6 connected right and left axles;
7 right and left wheels attached to the right and left axles respectively;
8 a motor controller electrically connected to the motor; and
9 a power source electrically connected to the motor controller,
10 wherein said powering assembly resides substantially within the outer
11 frame width.

1 20. A powered hand truck comprising:
2 a convertible hand truck having a frame defining an outer frame width;
3 an electric motor;
4 a transaxle driven by the electric motor and having differentially
5 connected right and left axles;
6 right and left wheels attached to the right and left axles respectively;
7 a motor controller electrically connected to the motor; and
8 a power source electrically connected to the motor controller,
9 wherein said motor, transaxle, motor controller, and power source
10 reside substantially within the outer frame width.